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THE MONITORING, EVALUATION, REPORTING, AND VERIFICATION OF CLIMATE CHANGE MITIGATION PROJECTS: DISCUSSION OF ISSUES AND METHODOLOGIES AND REVIEW OF EXISTING PROTOCOLS AND GUIDELINES

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ABSTRACT

Because of concerns with the growing threat of global climate change from increasing emissions of greenhouse gases, the United States and other countries are implementing, by themselves or in cooperation with one or more other nations (i.e., joint implementation), climate change mitigation projects. These projects will reduce greenhouse gas (GHG) emissions or sequester carbon, and will also result in non-GHG impacts (i.e., environmental, economic, and social impacts).

Monitoring, evaluating, reporting, and verifying (MERV) guidelines are needed for these projects in order to accurately determine their net GHG, and other, benefits. Implementation of MERV guidelines is also intended to: (1) increase the reliability of data for estimating GHG benefits; (2) provide real-time data so that mid-course corrections can be made; (3) introduce consistency and transparency across project types and reporters; and (4) enhance the credibility of the projects with stakeholders.

Any proposed MERV guidelines should reflect the following principles: they should be consistent, technically sound, readily verifiable, objective, simple, relevant, transparent, and cost-effective. In practice, tradeoffs will have to be made among some of these criteria: e.g., simplicity versus the technical soundness of a guideline, and high transaction costs and comprehensiveness.

In this paper, we review the issues and methodologies involved in MERV activities. In addition, we review protocols and guidelines that have been developed for MERV of GHG emissions in the energy and non-energy sectors by governments, nongovernmental organizations, and international agencies. We comment on their relevance and completeness, and identify several topics that future protocols and guidelines need to address, such as: (1) establishing a credible baseline; (2) accounting for impacts outside project boundaries through leakage; (3) net GHG reductions and other impacts; (4) precision of measurement; (5) MERV frequency; (6) persistence (sustainability) of savings, emissions reduction, and carbon sequestration; (7) reporting by multiple project participants; (8) verification of GHG reduction credits; (9) uncertainty and risk; (10) institutional capacity in conducting MERV; and (11) the cost of MERV.

Some of the MERV issues are of a generic nature, whose resolution would benefit all future MERV guidelines and protocols. These issues would best be addressed through an international consensus. The consensus should:

1. Clarify, at the earliest possible date, the accepted roles and responsibilities of national governments, private businesses, nongovernment organizations, and international organizations in the joint implementation accreditation process. Clearer property

rights would reduce MERV costs, by focusing these activities on the correct parties at an earlier point in time.

2. Initiate a process to certify nongovernment organizations to provide MERV services.

3. Provide guidance on the determination of a baseline. How long should a baseline remain "fixed" before a new baseline is developed? If new information becomes available after a project has been implemented, does the baseline have to remain fixed after implementation and as specified in a certification document, or can the baseline be adjusted?

4. Decide whether MERV guidelines could exclude certain types of projects that are most likely small in scale. Also, one could specify thresholds for an accumulation of projects in the economy above which significant indirect impacts are to be expected (e.g., if 5-10% of electricity generated in a country is affected by a project).

5. Decide when a country's laws and guidelines (e.g., environmental impact statements) apply; e.g., where an investor country funds a project in a host country, do the laws of the investor country apply? or the host country's? or both? And what happens if the laws from the two countries conflict?

6. Create a tribunal to resolve disputes over verification results and develop a set of MERV guidelines.

The COP and national governments should foster information exchange for joint implementation in general, and for MERV issues discussed in this report.

In conclusion, there is a need to collect, analyze, summarize and disseminate the best responses to the topics addressed in this report and currently being dealt with in existing climate change mitigation projects. The experience gained in these projects should be very helpful for formulating MERV guidelines for climate change mitigation projects, which is the next phase in our project.

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